



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/829,913	04/11/2001	Toshimi Iizuka	35.C9339 CII/DI	1149

5514 7590 09/01/2004

FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

NGUYEN, THONG Q

ART UNIT PAPER NUMBER

2872

DATE MAILED: 09/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/829,913

Applicant(s)

IIZUKA, TOSHIMI

Examiner

Thong Q Nguyen

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11, 12 and 16-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-12 and 16-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 29, 2004 has been entered.

Response to Amendment

2. The present Office action is made in response to the amendment filed on 7/29/2004. It is noted that in the mentioned amendment, applicant has made amendments to the specification and the claims.

Regarding to the claims, applicant has made amendments to claims 11-12 and 16-19, and simultaneously added a new set of claims, i.e., claims 20-22, into the application. A review of the device as recited in the newly-added claims 20-22 has resulted that the device has the same scope as that recited in the original claims 11-12 and 16-19, and thus all of pending claims 11-12 and 16-22 are examined in this Office action.

Specification

3. The lengthy specification which is amended by the amendment has not been checked to the extent necessary to determine the presence of all possible minor errors.

Art Unit: 2872

Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 11-12, 16-20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ando et al (U.S. Patent No. 4,013,339) in view of Furukawa et al (U.S. Patent No. 3,942,862) and Sekine et al (U.S. Patent No. 5,107,293) (all of record).

Ando et al disclose an optical device having an objective lens system for forming an image of an object, a prism system for erecting the image formed by the objective lens system, and an eyepiece for viewing the erected image. The objective lens system (62) disposed on the light incident side the erecting prism system and comprises a composite lens element and the eyepiece lens system disposed on the light emission side of the erecting prism system and comprises a set of lens elements having a composite element and the number of lens elements of the eyepiece is larger than the number of lens element of the objective lens system. As a result, an image of an object is viewed by an observer via the objective lens system, the image erecting prism system and the eyepiece lens system. See columns 8-9 and figs. 6 and 9, for example. Ando et al also teach that the prism system is operated by a control mechanism for the purpose of stabilization the image when the optical device is subjected to vibrations or hand-shake. It is also noted that the device as provided by Ando et

al contains a space located near the prism system for the purpose of supporting the mechanism used to operate the prism system. While Ando et al do not teach that their device comprises a variable angle prism system for the purpose of stabilization the image separately from the prism system for erecting an image; however, the use of a prism system having a variable prism system for stabilization an image caused by vibrations and another prism system for erecting an image would have been obvious to one skilled in the art for the following reasons: 1) One skilled in the art would readily recognize that the use of a prism for stabilization an image and simultaneously erecting an image is always heavy and requires a lot of energy for operation while still not providing a good quality of image to be viewed by an observer; 2) the use of such a prism system having both mentioned functions would require a relatively large space for the movement of the prism system, and the time for response is slow due to the heavy weight of the prism system and the mechanism used to operate the prism system; 3) the use of a first set of optical system for stabilization an image wherein the optical system is located separately from a second set of optical system for erecting an image is well known to one skilled in the art as can be seen in the optical device disclosed by Furukawa et al. In particular, Furukawa et al teach an optical device having an objective lens system for forming an image, a set of two lenses which is able to move with respect to each other for the purpose of stabilization an image, a set of relay lens for the purpose of erecting the stabilized image. See Furukawa et al, columns 4-5 and figs. 5-6, for example.

Art Unit: 2872

It is also noted that the suggestion of using a variable angle prism for the purpose of compensating image blurs/shake caused by vibration in place of a heavy mechanism for the same function is clearly suggested to one skilled in the art as can be seen in the system provided by Sekine et al. In particular, Sekine et al disclose that the use of a variable angle prism in place of a heavy mechanism such as a rotating gyro, an accelerometer or the like will reduce the weight, size and cost. See Sekine et al, column 1, lines 25+. It is also noted that the use of a circuit having detector for detecting the shake and actuator for controlling the operation of the variable angle prism is disclosed by Sekine et al in column 4. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the optical device provided by Ando et al by separating the functions of erection an image and compensation image blued caused by vibration and using a variable angle prism for compensating image blurs/shake as suggested by Furukawa et al and Sekine et al for the purpose of reducing the weight and for obtaining a better quality of image.

6. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ando et al in view of Furukawa et al and Sekine et al as applied to claim 20 above, and further in view of Cierva (U.S. Patent No. 3,514,192).

The combined product provided by Ando et al, Furukawa et al and Sekine et al does not clearly state that the variable angle prism is rotated about two rotational axes as claimed. However, the use of a variable angle prism having two transparent plates connected by bellows and supporting a liquid wherein the

Art Unit: 2872

plates are able to rotate about two perpendicular axes for varying the angle of the prism is clearly suggested to one skilled in the art as can be seen in the optical device provided by Cierva. See columns 2-3 and figs. 1-3. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the combined product provided by Ando et al. Furukawa et al and Sekine et al by rotating the prism about two perpendicular axes as suggested by Cierva for the purpose of suppressing shakes to the device in both directions.

Response to Arguments

7. Applicant's arguments filed on 7/29/2004 have been fully considered but they are not persuasive.

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention

Art Unit: 2872

where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the use of a mechanism for improving the quality of image is disclosed by both Ando et al and Furukawa et al. The mechanism used by both Ando et al and Furukawa et al comprises heavy device for operation as can be seen in each device. The suggestion of use a mechanism having a variable angle prism, an actuator and a sensing system in place of heavy mechanism for the purpose of improving the adequate characteristics in terms of responsivity, accuracy, sensitivity, etc... is clearly disclosed by Sekine et al as can be seen in column 1, lines 25-45.

In response to applicant's argument that the references in combination would obscure the visual axis of an observer, the Examiner respectfully disagrees because one skilled in the art will recognize that (s)he will arrange the components in a suitable arrangement so that the field of view of the observer will not be obscured by the components. Further, the present claims has failed to recite any specific arrangement of the components formed the device claimed.

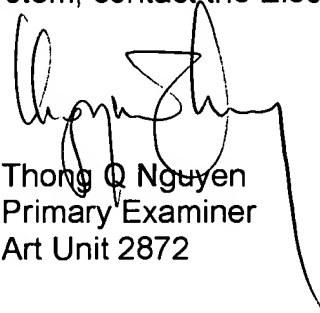
Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Q Nguyen whose telephone number is (571) 272-2316. The examiner can normally be reached on M-F.

Art Unit: 2872

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew A Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thong Q. Nguyen
Primary Examiner
Art Unit 2872
